AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

1-21. (Cancelled)

22. (Currently Amended) A fluid delivery system, comprising:

a reusable fluid path for delivering fluid to multiple patients, the reusable fluid path comprising:

a first source of fluid medium;

a first pressurizing device associated with the first source of fluid medium;

a second source of fluid medium;

a second pressurizing device associated with the second source of fluid medium;

a per-patient disposable fluid path operable to deliver the first and second fluid media at least to a balloon catheter in a patient, the per-patient disposable fluid path comprising:

a valve;

a tube; and

a per-patient connector; and

a control unit in communication with the first and second pressurizing devices;

wherein the control unit is adapted to actuate the first and second pressurizing devices to deliver the first and second fluid media to a balloon on the balloon catheter; and

wherein the per-patient disposable fluid path is connected to the reusable fluid path before the first and second fluid media are delivered at least to the balloon catheter and is disconnected from the reusable fluid path after the first and second fluid media are delivered at least to the balloon catheter.

23. (Previously Presented) The fluid delivery system of Claim 22 wherein the first fluid medium comprises a contrast medium and the second fluid medium comprises a diluent medium.

24. (Currently Amended) The fluid delivery system of Claim 22 wherein the reusable fluid path further comprises a mixing apparatus.

25. (Currently Amended) The fluid delivery of Claim 22 wherein the reusable fluid path further comprises a pressurization pump.

26. (Currently Amended) The fluid delivery system of Claim 22 wherein the valve of the per-patient disposable fluid path comprises a check valve.

27. (Previously Presented) The fluid delivery system of Claim 22 wherein the first pressurizing device comprises a pump.

28. (Previously Presented) The fluid delivery system of Claim 27 wherein the pump is a peristaltic pump.

29. (Currently Amended) The fluid delivery system of Claim 22 wherein the reusable fluid path further comprises an air detector.

30. (Currently Amended) The fluid delivery system of Claim 22, wherein the reusable fluid path comprises a first portion associated with the first source of fluid medium and a second portion associated with the second source of fluid medium.

31. (Cancelled)

32. (Previously Presented) The fluid delivery system of Claim 22 wherein the second pressurizing device comprises a pump.

33. (Previously Presented) The fluid delivery system of Claim 32 wherein the pump is a peristaltic pump.

34. (Previously Presented) The fluid delivery system of Claim 22, further comprising a handheld control mechanism in communication with the control unit to control the first and second pressurizing devices.

35. (Previously Presented) The fluid delivery system of Claim 22 wherein the first and second fluid media at least partially inflate the balloon.

36-37. (Cancelled)

38. (Currently Amended) A method of delivering fluid media to a balloon catheter in a patient using a fluid delivery system comprising a reusable fluid path comprising a first source of fluid medium, a first pressurizing device associated with the first source of fluid medium, a second source of fluid medium, and a second pressurizing device associated with the second source of fluid medium, and a per-patient disposable fluid path comprising at least a valve, a tube, and a per-patient connector and associated with a balloon catheter disposed in a patient, the method, comprising:

associating ~~a~~ the reusable fluid path with the per-patient disposable fluid path such that the first pressurizing device associated with the first source of fluid medium, the second pressurizing device associated with the second source of fluid medium, and the balloon catheter in the patient~~, the fluid path comprising a valve, a tube, and a per-patient connector~~ are connected via the reusable fluid path comprising the valve, the tube, and the per-patient connector; ~~and~~

actuating the first and second pressurizing devices to deliver the first and second fluid media via the fluid path at least to a balloon on the balloon catheter; and

wherein the per-patient disposable fluid path is connected to the reusable fluid path before the first and second fluid media are delivered at least to the balloon catheter and is disconnected from the reusable fluid path after the first and second fluid media are delivered at least to the balloon catheter.

39-40. (Cancelled)

41. (Previously Presented) The method of Claim 38, further comprising:

providing a control unit in communication with the first and second pressurizing devices to control the operation thereof.

42. (Previously Presented) The method of Claim 41, further comprising:

providing a handheld control mechanism in communication with the control unit to control the first and second pressurizing devices.

43. (Previously Presented) The method of Claim 38 wherein the first and second fluid media at least partially inflate the balloon.

44. (Previously Presented) The method of Claim 38 wherein the first and second fluid media are mixed in the fluid path.

45. (Previously Presented) The method of Claim 44 wherein the first fluid medium comprises a contrast medium and the second fluid medium comprises a diluent medium.

46. (Previously Presented) The fluid delivery system of Claim 22 wherein the first and second pressurizing devices are operable to deliver the first and second fluid media to the balloon catheter at increasing pressure.

47. (Previously Presented) The fluid delivery system of Claim 46 wherein the increasing pressure comprises stepped increasing pressure.

48. (Previously Presented) The method of Claim 38 wherein the first and second pressurizing devices are actuated to deliver the first and second fluid media to the balloon catheter at increasing pressure.

49. (Previously Presented) The method of Claim 48 wherein the increasing pressure comprises stepped increasing pressure.

50. (Cancelled)

51. (Cancelled)

52. (Currently Amended) A method of delivering fluid media to a balloon catheter in a patient using a fluid delivery system comprising a reusable fluid path comprising a first source of fluid medium, a first pressurizing device associated with the first source of fluid medium, a second source of fluid medium, and a second pressurizing device associated with the second source of fluid medium, and a per-patient disposable fluid path comprising at least a valve, a tube, and a per-patient connector and associated with a balloon catheter disposed in a patient, the method comprising:

associating ~~a~~ the reusable fluid path at least with the per-patient disposable fluid path such that the first pressurizing device associated with the first source of fluid medium, the second pressurizing device associated with the second source of fluid medium, and ~~a~~ the balloon catheter in a blood vessel of a patient~~, the fluid path comprising a per-patient portion comprising a valve, a tube, and a per-patient connector~~ are connected via the reusable fluid path comprising the valve, the tube, and the per-patient connector;

actuating one or both of the first pressurizing device and the second pressurizing device to deliver one or both of the first fluid medium and the second fluid medium to the blood vessel of the patient;

actuating one or both of the first pressurizing device and the second pressurizing devices to deliver one or both of the first and second fluid media via the fluid path to a balloon on the balloon catheter; ~~and~~

inflating the balloon on the balloon catheter; and

wherein the per-patient disposable fluid path is connected to the reusable fluid path before the first and second fluid media are delivered at least to the balloon catheter and is disconnected from the reusable fluid path after the first and second fluid media are delivered at least to the balloon catheter.

53. (Previously Presented) The method as claimed in Claim 52 wherein the first and second pressurizing devices comprise pumps.

54. (Previously Presented) The method as claimed in Claim 53 wherein the pumps comprise peristaltic pumps.

55. (Currently Amended) The method as claimed in Claim 52 further comprising disconnecting the per-patient ~~portion~~ disposable fluid path from the reusable fluid path.

56. (Currently Amended) The method as claimed in Claim 55 wherein the per-patient ~~portion~~ disposable fluid path is disconnected from the reusable fluid path by disconnecting the per-patient connector from the reusable fluid path.

57. (Previously Presented) The method as claimed in Claim 52 wherein the valve comprises a check valve.